



Regulatory Overview Voluntary Cleanup and Property Redevelopment Program (VCPRP)

**2017 KDHE Environmental
Conference**

August 9, 2017

**Capital Plaza Hotel & Manor
Conference Center**



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Introduction

- The VCPRP Act - 1997 w/amendments in 2015.
 - Allows owners, developers, prospective purchasers, and other eligible parties to voluntarily address environmental issues associated with contaminated properties.
- External Stakeholders Meeting - discuss potential program improvements.
 - Goal: Resolve concerns, create efficiency, move sites to closure, remain protective of human health and environment.



Stakeholders Meetings

- Class I site NFA - responsible party enter a program?
- Incorporate risk into determining cleanup levels
- Actual vs. beneficial groundwater use – cleanup standard
- Evaluate/amend policies: Nitrate, LNAPL
- Qualified Environmental Consultant Determination
 - Kansas Board of Technical Professions
 - Qualified environmental professional is the “responsible party’s” due diligence.



2015 Statute Revision

- House Bill 2193 → K.S.A.
- The amendments address 3 primary goals of VCPRP
 - 1) Allow an innocent adjacent property owner to receive a No Further Action (NFA) determination regardless of whether or not the responsible party for the source of the contamination is enrolled in a state cleanup program.
 - 2) Provide KDHE with the flexibility to issue NFA determinations based on risk analysis for low-risk sites.
 - 3) Remove a requirement that BER determine which environmental consulting companies are qualified to work for private industries as part of the program.



Proposed 2017 Reg Revisions General Changes

- Streamline processes, yet remain protective of human health and the environment.
- Remove self-regulating language
- Remove duplicative language that is already found in statute
- Substitute “secretary” for “department”
- Grammatical changes or points of clarification.

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Definition Revisions

KAR 28-78-1

- Added:

- Environmental use control
- Risk Management Program
- “Secretary” added to definition of “voluntary party” as the person who determines eligibility

- Revised:

- Class I & II
- Environmental site assessment
- Maximum contaminant level
 - revised to ensure consistency amongst Bureaus

- Removed:

- Adjacent property-A Class I site is not the source
- Class III & IV
- Qualified environmental professional



Applicant

- KAR 28-71-2 clarifies the applicant's relationship by way of title, control or access to the property *described in the application*



Eligibility Determination

- KAR 28-71-3 outlines the eligibility determination
 - The amendment clarifies that properties are “*required*” to meet the criteria defined in K.S.A. 65-34,161 et seq



Application Process

- KAR 28-71-4 provides
 - Requirements for a complete application
 - Confirms the secretary will make the determination of eligibility
 - Details the reapplication process
- Self-regulating language within the regulation was removed (e.g. 60 days to review the application).



Classification Determination

- KAR 28-71-5 clarifies supporting information needed to justify contaminant class
 - The contaminant classes were consolidated from four to two classifications
 - The amendment simplifies the eligibility determination process



Current Classification Determination

- Class I: Suspected or confirmed contamination originates from an offsite source.
- Class II: Suspected or confirmed soil contamination on the property.
- Class III: Suspected or confirmed soil and groundwater contamination on the property.
- Class IV: Suspected or confirmed soil and groundwater contamination both on and off the property.



New Classification Determination

- Class I: Contamination originates from an offsite source.
- Class II: Contamination includes properties where the identified contamination originated on the property.
 - Includes all media impacted, such as soil, groundwater, air, etc.
 - Additional documentation can be submitted to the department to support reclassification of the property.



Voluntary Agreement

- KAR 28-71-6
 - Class I subject property initial deposit increases from \$1,000 to \$2,000
 - Class II maximum initial deposit remains at \$5,000.
 - Criteria to define the deposit based on the site classification will be addressed in guidance.
 - The remaining deposit at project conclusion or mutual agreement on termination will be returned to the voluntary party



Initial Deposit and Oversight

- KAR 28-71-7
 - Maintain a minimum account balance for contamination properties
 - \$1,000 for class I
 - \$2,000 for class II
 - Invoicing - Quarterly invoices
 - Once the deposit is reduced to the minimum account balance



Initial Deposit and Reimbursement Cont.

- Department oversight is revised to allow oversight to be performed by the department or KDHE’s contractors
 - *“Consultant” was removed from regulation*
- Oversight will not specifically include “necessary administrative decision making by the department”
- Removed purpose of oversight by the department



Environmental Site Assessment

- KAR 28-71-8
 - Defines qualifications of the environmental site assessment preparer
 - Assessment prepared by “an individual who possesses the education, experience, or licensure sufficient to prepare a competent environmental site assessment”
 - Reference to “*qualified environmental professional*” was removed from the regulation
 - List of necessary elements to be included in the environmental site assessment
 - “Evidence” regarding the characterization of the media and impact to property was added as an acceptable type of environmental site assessment information



Voluntary Cleanup Work Plans & Reports

- KAR 28-71-9 - Objectives for work plans and reports for investigation through remediation
 - ADDED: Work shall be performed in accordance with standard industry practices
 - REMOVED: Required work plans and reports to follow a KDHE-provided scope of work. However, KDHE will continue to provide guidance scopes of work



Voluntary Cleanup Work Plans & Reports Cont.

- Based on actual risk to human health and the environment for documented present and proposed future land use
 - Proposal: Meet applicable state standards and guidelines or acceptable contaminant concentrations as determined by a risk analysis that evaluates the subject property and surrounding properties as a whole
- Allow verification sampling to be conducted by the voluntary party, KDHE, or both



No Further Action Determination

- KAR 28-71-10
- Removed 28-71-10(b) – 28-71-10(f)
- Revised to include only three (3) NFA determinations
 - NFA Class I
 - NFA Class II
 - NFA Class II with conditions



No Further Action Determination Cont.

- Class I NFA: Subject property where contamination resulted from that source property
 - Removed the requirement that a source property must be enrolled in a state or federal program prior to granting an NFA
 - Off-site property owners could not require a potential responsible party to enroll the source area property in a state response program



No Further Action Determination Cont.

- Class II NFA: Subject property was the source of contamination
 - Contamination presents significant risk to human health and environment by comparing them to:
 - Existing criteria: background levels, applicable state or federal cleanup levels, or site-specific cleanup levels); or
 - New criteria: Acceptable concentrations determined by the department in a site-specific qualitative risk analysis that evaluates the property and surrounding properties as a whole



No Further Action Determination Cont.

- Class II NFA with conditions:
 - Department approved-controls are necessary
 - Restrict use of a property
 - Ensure continued protection of human health and environment
 - Controls were expanded to include
 - Institutional controls,
 - Environmental use controls,
 - Risk Management Program Plan, or
 - Combination thereof

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Remedial Standards and Actions

- K.A.R. 28-71-11
 - Site-specific cleanup levels or other risk analysis to be included when determining cleanup levels
 - Removed: “cost effective,” “including innovative technologies and natural processes,” and “degradation of the natural source is maintained.”
 - Added: Site-specific qualitative risk analysis or other risk analysis approved by the Secretary



Remedial Standards and Actions Cont.

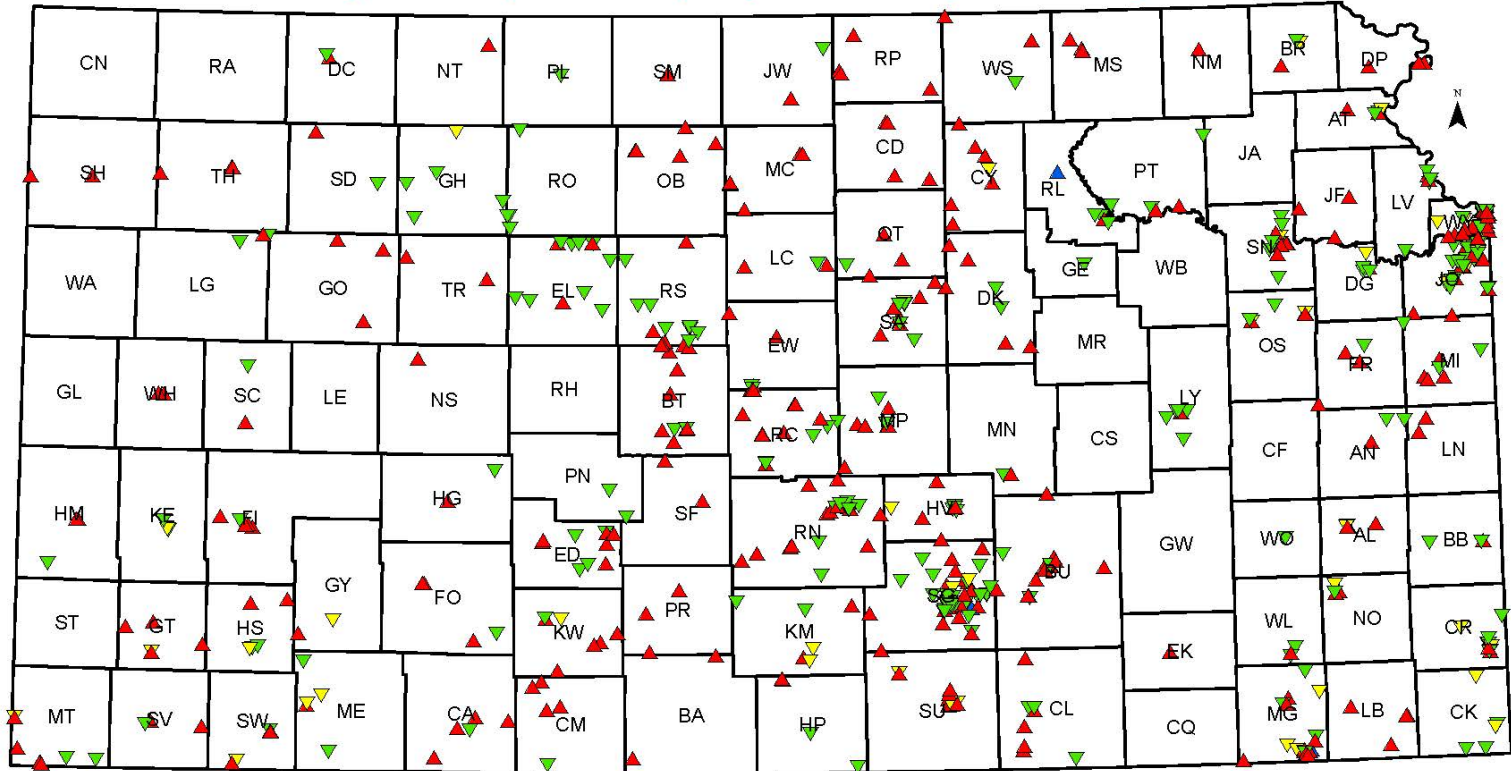
- “Institutional controls” was replaced with “approved controls”
- Allow cleanup levels based on “actual and most probable use” rather than “most beneficial use”
 - Considering present and future land use
- Specific cancer risk levels and hazard index values were removed from this section as they are addressed in industry-standard risk analysis



Public Notification and Participation

- KAR 28-71-12
 - Duplicative language addressed in statute and self-regulating language were removed
 - Upon acceptance of the voluntary cleanup plan, KDHE will post the notice on the Kansas Department of Health and Environment, Voluntary Cleanup Program web page and either in a local newspaper, or the Kansas Register.
 - The public comment period shall extend for at least 15 days.
 - Public information meeting, if needed

Voluntary Cleanup and Property Redevelopment Program Sites



▲ Active ▼ Resolved ▼ Resolved with Restrictions ▲ Transferred out of Bureau



Program Summary

SFY2017

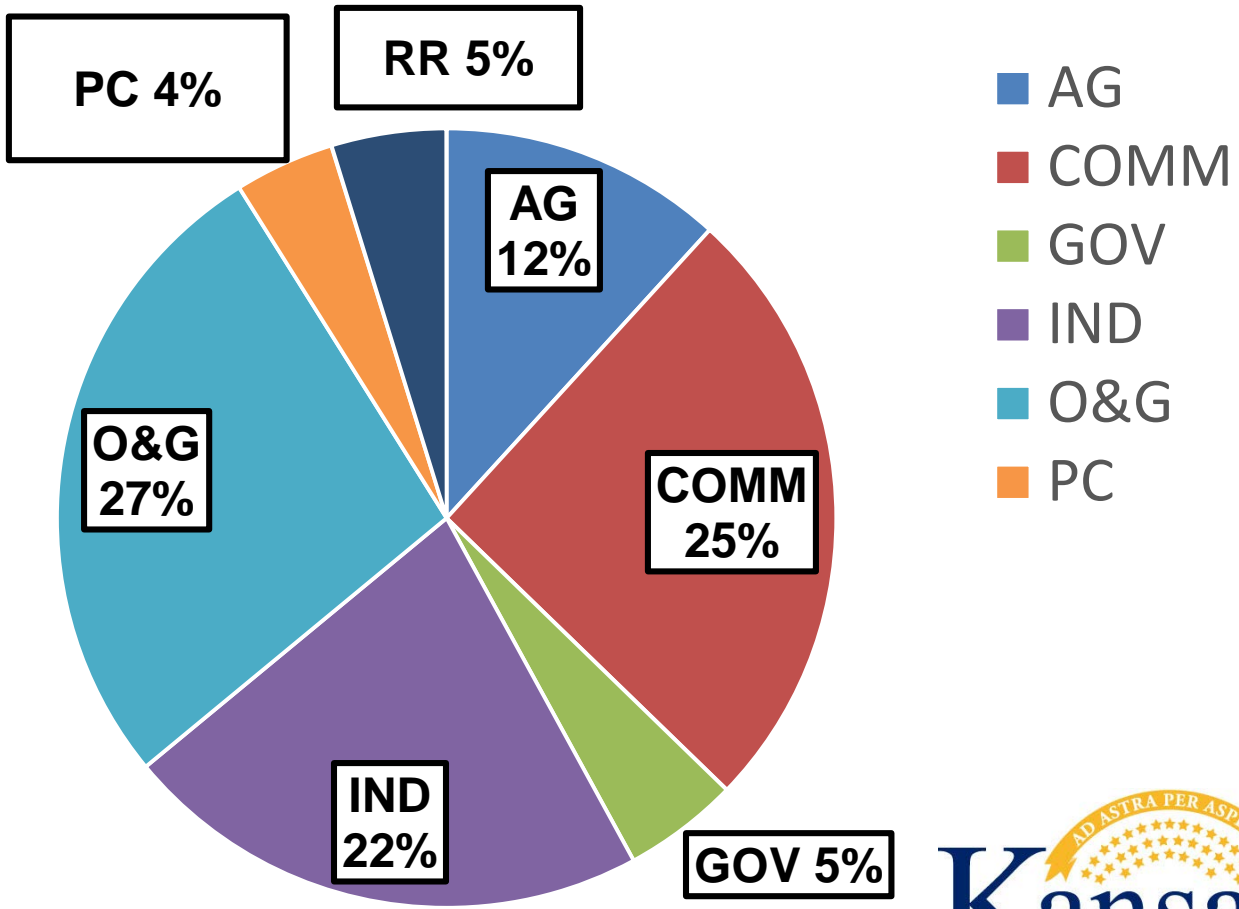
- 19 applications received
- 15 NFA Determination letters issued
- 344 active sites

Program Life (1997-2017)

- 703 applications received
- 312 NFA Determination letters issued
- 684 Voluntary Agreements executed
- 3,382.5 acres remediated



NFAs by Category



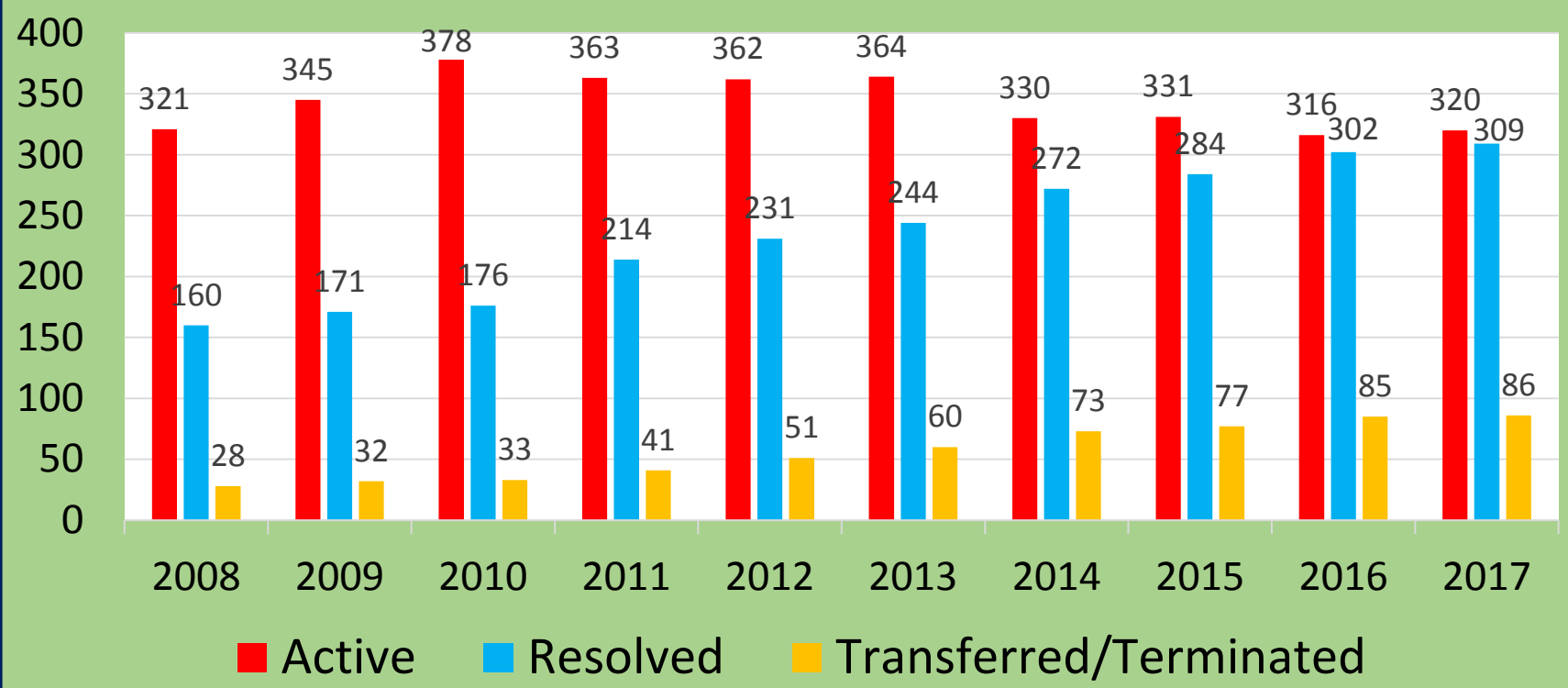
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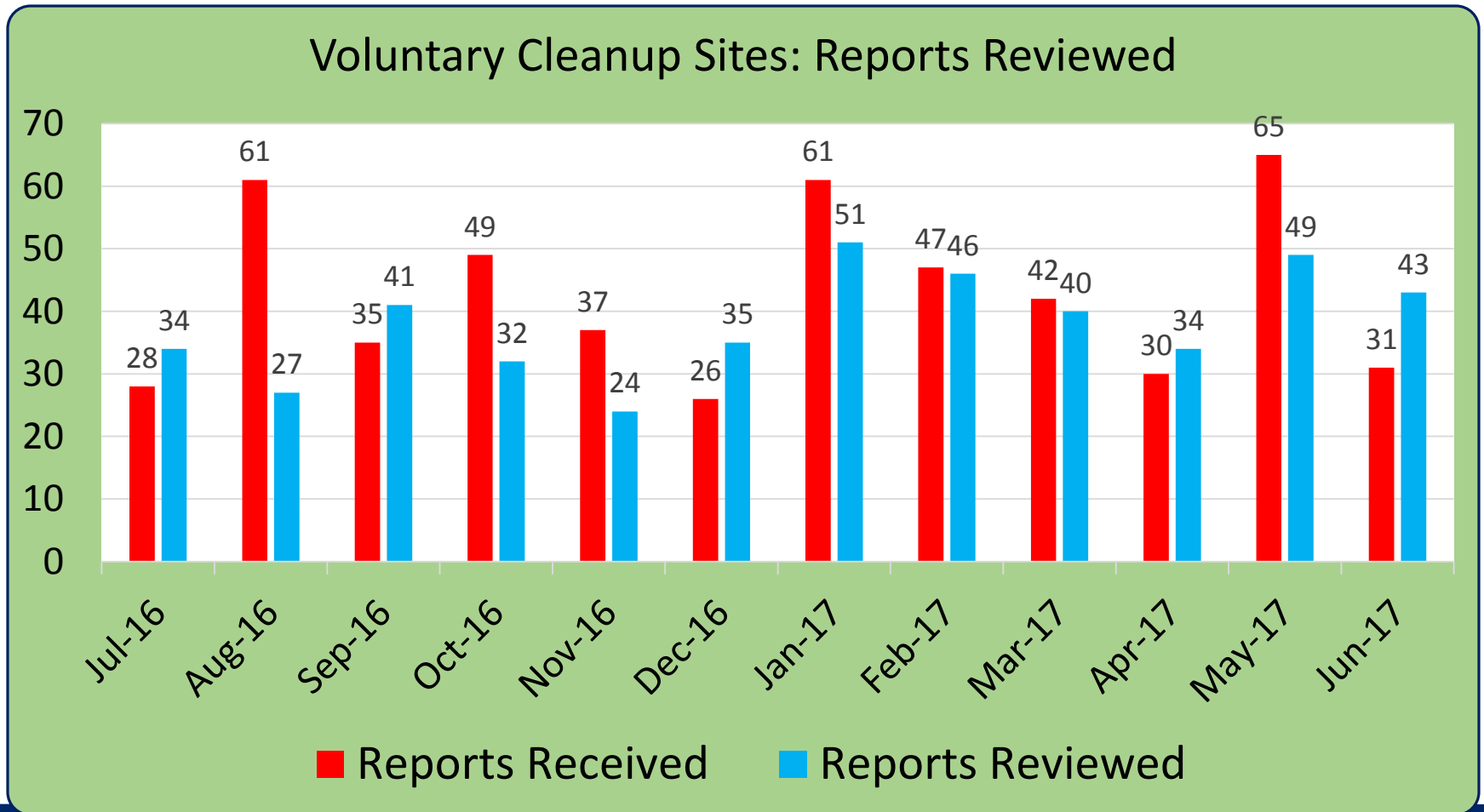
Active vs. Resolved vs. Transferred/Terminated

Voluntary Cleanup and Property Redevelopment Program





Reports Received vs. Reports Reviewed



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Scenario 1 - Qualitative Risk Analysis

- Historical Fueling Facility
- COCs: Petroleum Hydrocarbons
- Soil impacts confined to the fueling area, exceed Nonresidential Soil-Groundwater RSK levels
- Total depth of soil impact is 30' bgs, except at one location that extends to 40' bgs
- Shallow wells went dry, but impacts were confined to four monitoring wells
- Installed deeper wells to intersect the groundwater table, no impacts since 2009



Scenario 1 - Conceptual Site Model

- Evaluation of Exposure Pathways
- Residual soil impacts remains as potential source
- No operations in last 35 years
- Impacts to groundwater not detected since 2009, due to declining groundwater levels



Scenario 1 - Conceptual Site Model

- Transport Mechanism: Soil and Groundwater
- Route of Exposure: Dermal Contact and Ingestion
- Land Use: Industrial
- Anticipated Future Land Use: Industrial



Scenario 1 - Conclusion

- Current soil pathway incomplete due to depth of impacts
- Current soil to groundwater and groundwater pathways incomplete due to drop in groundwater table
- Current land use industrial and is expected to remain industrial
- EUC restrictions will address future land use, groundwater use and soil



Scenario 2 - Qualitative Risk Analysis

- Former storage, handling and distribution of anhydrous ammonia
- Future land use – agricultural related
- Surrounding land use – primarily agricultural fields with center pivot irrigation systems
- Nitrate concentrations exceed 40 mg/kg at depth
 - 140 mg/kg in the surficial soil
- Nearest private well 1.5 miles downgradient
- Groundwater evaluated based on offsite irrigation and private wells. No offsite impacts to groundwater identified
- Source removal of soil exceeding 150 mg/kg
 - 756 pounds of nitrogen



Scenario 2 - Geology/Hydrogeology

- Geology – 400 feet of unconsolidated sediments (interbedded layers of clay, sand, caliche beginning around 100 feet in depth over shale and limestone bedrock)
- Kingsdown silt, Meade formation, Ogallala formation
- Wells in the area extend 350 to 450 ft bgs
- DTW – 240 feet bgs
- GW Flow Direction: Southeast



Scenario 2

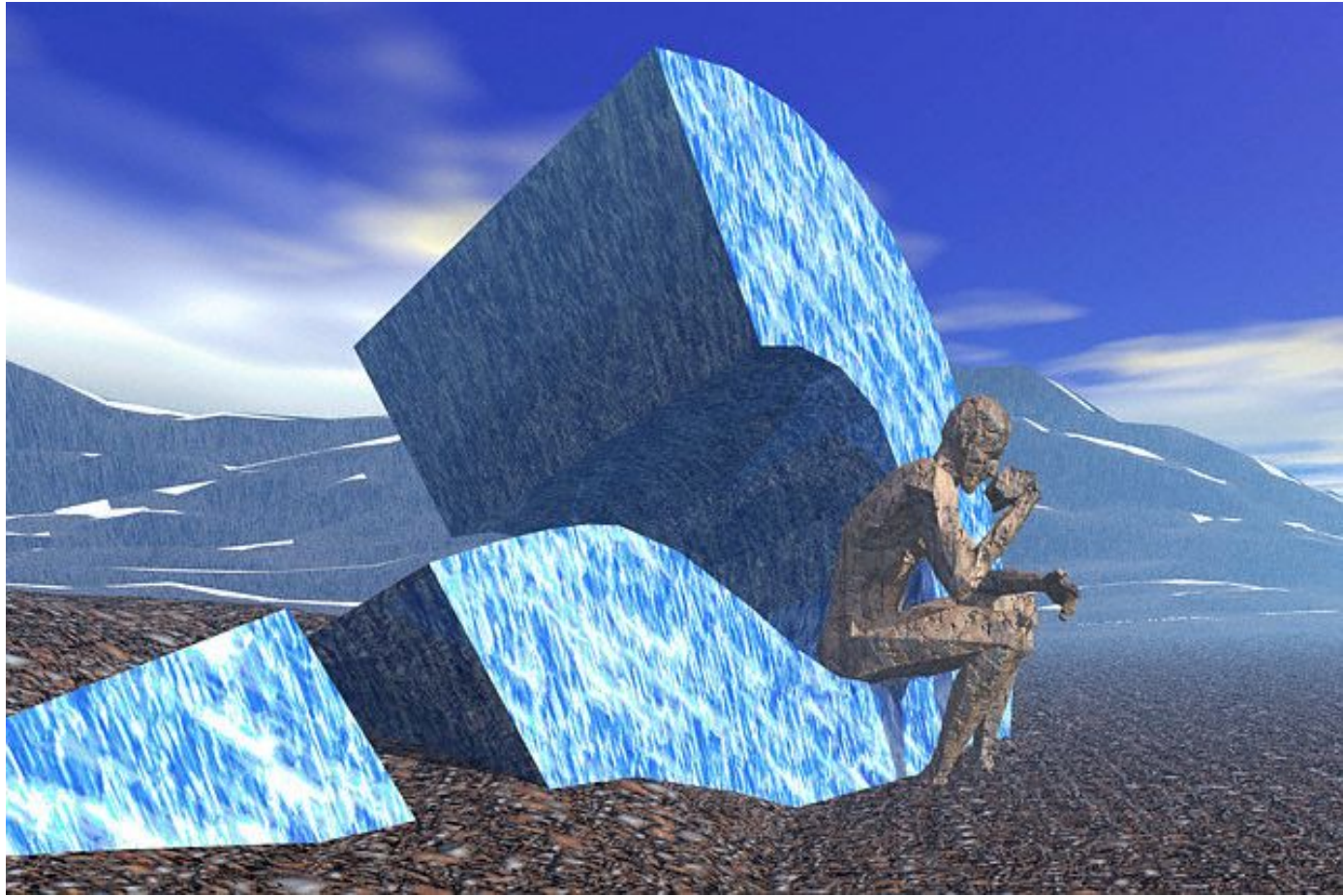
Summary of Risk Assessment

Transport Model

- Used to evaluate nitrate concentrations in groundwater
- Indicates based on conservative estimates, dispersive characteristics within the aquifer will reduce nitrate concentrations within tens of feet downgradient of the site



QUESTIONS?



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